

Remarks

Entry of this amendment, and reconsideration and allowance of all claims are respectfully requested. Claims 1-16, 18-30 & 32-38 remain pending.

By this amendment, the subject matter of canceled claims 17, 31 and 39 is incorporated into the respective independent claims 1, 18 & 32. Additionally, the subject matter is qualified to indicate that the adapting of the encode parameter in one or more of the encoders is automatic when no set of the encode parameters of the sets of encode parameters employed by the multiple encoders produces an encoded result which meets the encode objective. Support for the claim amendments can be found in canceled dependent claims 17, 31 & 39, as well as in FIG. 7 and the supporting discussion thereof. No new matter is added to the application by any amendment presented.

Substantively, prior claims 1-9, 11-24 and 16-39 were rejected under 35 U.S.C. §102(b) as being anticipated by Park et al. (U.S. Patent No. 5,528,628; hereinafter “Park”), and claims 1-12, 17-26 & 31-39 were rejected under 35 U.S.C. §102(b) as being anticipated by Suzuki (U.S. Patent No. 5,850,527). These rejections are respectfully traversed to any extent deemed applicable to the claims presented herewith. Without acquiescing the substance of the anticipation rejections, independent claims 1, 18 & 32 are amended herein in a *bona fide* attempt to further prosecution of this application.

In one aspect, Applicants’ invention is directed to a system for encoding a sequence of video frames (e.g., claim 1). The system includes multiple encoders connected in parallel, each encoder receiving the sequence of video frames for encoding thereof. Further, each encoder employs a set of encode parameters, with at least one encode parameter of the sets of encode parameters being varied between at least two encoders of the multiple encoders connected in parallel. The system further includes a controller coupled to the multiple encoders for selecting one set of encode parameters from the sets of encode parameters which best meets an encode objective, and means for outputting a bitstream of encoded video data encoded from the sequence of video frames using the one set of encode parameters. The system further includes means for automatically adapting an encode parameter in the one or more encoders of the multiple encoders when no set of the encode parameters of the sets of encode parameters employed by the multiple encoders produces an encoded result which meets the encode

objective. This automatic adapting allows for optimization of the set of encode parameters for use in encoding the sequence of video frames should one of the sets of encode parameters employed by the multiple encoders not meet the encode objective.

With respect to the anticipation rejections, it is well settled that there is no anticipation of a claim unless a single prior art reference discloses: (1) all the same elements of the claimed invention; (2) found in the same situation as the claimed invention; (3) united in the same way as the claimed invention; and (4) in order to perform the identical function as the claimed invention. In this instance, Park and Suzuki both fail to disclose various aspects of Applicants' invention as recited in the independent claims presented, and as a result, do not anticipate (or even render obvious) Applicants' invention.

Park describes an apparatus for variable-length-coding and variable-length-decoding using a plurality of Huffman coding tables. Each table has a symbol-codeword association different from the other tables according to statistics regarding the symbols and a variable-length-coding device for coding the input symbols according to each of the variable-length-code tables for every block in a predetermined block data unit, for generating codewords.

Applicants respectfully submit that Park does not teach or suggest their now recited system for encoding a sequence of video frames wherein the controller includes means for automatically adapting an encode parameter for one or more encoders of the multiple encoders when no set of the encode parameters produces an encoder result which meets the encode objective. The Huffman code tables 22(1), 22(2) ... 22(N) comprise static tables having symbol-codeword associations according to different assigned statistical probabilities for the symbols. A careful reading of Park fails to uncover any teaching or suggestion of a technique for automatically adapting one or more encode parameters of the multiple sets of encode parameters when none of the multiple encoders produces an encoded result which meets the defined encode objective. In Applicants' recited system, there is feedback which allows for the automatic adaptation of one or more sets of encode parameters employed by the multiple parallel connected encoders.

With respect to the claimed subject matter of original claim 17 (for example), the Office Action references at page 5, lines 17-21, switching unit 26 of FIG. 2. However, Applicants respectfully submit that switching unit 26 merely chooses one of the respective output terminals

in response to a selecting signal generated by comparator 25. Switching unit 26 simply outputs a signal supplied from a corresponding buffer as the variable-length-coded data. Comparator 25 receives and compares the respective count values from each counter, and provides switching unit 26 with a control signal for selecting the respective buffer with a minimum data value. Comparator 25 thus outputs information indicating which of the respective Huffman code tables is selected for the predetermined block data unit.

Applicants respectfully submit that there is no teaching or suggestion in Park of intelligence for automatically adapting one or more encode parameters of the sets of encode parameters employed by the multiple parallel connected encoders. Comparator 25 and switching unit 26 in Park are simply selecting the respective buffer with a minimum data value. There is no attempt to adapt a set of encode parameters of multiple parallel connected encoders, let alone the adaptation of an encode parameter of the set when no set of encode parameters of the sets of encode parameters employed by the multiple encoders produces an encoded result which meets the defined encode objective as recited by Applicants.

For the above reasons, Applicants request reconsideration and withdrawal of the anticipation rejection to the independent claims presented herewith based upon Park.

Suzuki discloses an information providing apparatus which identifies a transmission enabled band of a transmission line and selects information conforming to the band, thereby effectively utilizing the transmission band of the transmission line.

Applicants respectfully submit that Suzuki also does not teach or suggest their system, recited in claim 1, for the reasons set forth above in connection with Park. A careful reading of Suzuki fails to uncover any discussion or suggestion of a mechanism for automatically adapting an encode parameter of the one or more encoders of multiple parallel connected encoders when no set of the encode parameters produces an encoded result which meets the encode objective. In this regard, the Office Action references band detection unit 9a of FIG. 5 of Suzuki as allegedly teaching Applicants' recited functionality. This citation is respectfully traversed.

In Applicants' approach, there is an automatic adaptation of one or more encode parameters of one or more sets of encode parameters employed by the multiple parallel connected encoders when no set of encode parameters produces an encoded result which meets

the defined encode objective. The band detection unit 9a in Suzuki does not relate to adaptation of an encode parameter *per se*. The band detection unit 9a is connected to transmission lines 6a through 6j to detect bands of signals under transmission in the transmission lines, and then supply the information to the control unit 5 (see Col. 8, lines 57-60 of Suzuki, as well as Col. 11, lines 7-10). This detecting means does not relate to, nor does it suggest, Applicants' recited functionality for automatically adapting one or more encode parameters in a set of encode parameters employed by the multiple parallel connected encoders.

Further, Applicants respectfully submit that Suzuki teaches away from any automatic adaptation of the encode parameters by teaching that the encoders 71, 72 through 7m (to which the reproduced information is supplied) are compressing units compressing the information to be provided, and compress the supplied information at a predetermined compressing rate or by a predetermined compression method (see Col. 8, lines 30-35 of Suzuki). Since the compression rate and compression method are both predetermined, there can be no automatic adaptation of an encode parameter employed by one or more of the multiple parallel connected encoders 71, 72, 7m.

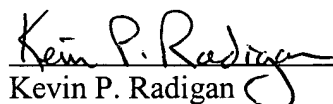
For the above reasons, Applicants respectfully submit that the amended independent claims 1, 18 & 32 patentably distinguish over the teachings of Suzuki. Reconsideration and withdrawal of the anticipation rejection based thereon is therefore requested.

The dependent claims are believed allowable for the same reasons as their respective independent claims, as well as for their own additional characterizations.

Applicants' undersigned attorney is available should the Examiner wish to discuss this application further.

The application is believed to be in condition for allowance and such action is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kevin P. Radigan", is written over a horizontal line.

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Dated: November 08, 2004.

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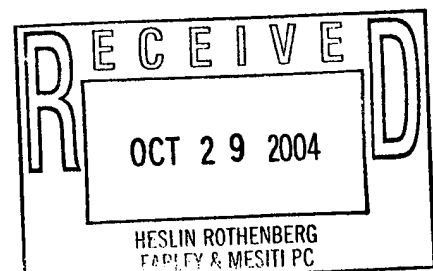
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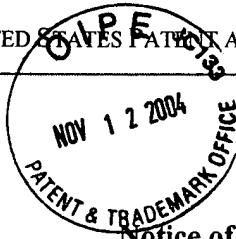
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Notice of Non-Compliant Amendment (37 CFR 1.121)

09/888904

The amendment document filed on 11-29-04 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121. In order for the amendment document to be compliant, correction of the following item(s) is required. **Only the corrected section of the non-compliant amendment document must be resubmitted (in its entirety), e.g., the entire "Amendments to the claims" section of applicant's amendment document must be re-submitted.** 37 CFR 1.121(h).

THE FOLLOWING CHECKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
- ☐ A. Amended paragraph(s) do not include markings.
 - ☐ B. New paragraph(s) should not be underlined.
 - ☐ C. Other _____
- ☐ 2. Abstract:
- ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
 - ☐ B. Other _____
- ☐ 3. Amendments to the drawings: _____
- ☒ 4. Amendments to the claims:
- ☐ A. A complete listing of all of the claims is not present.
 - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
 - ☒ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following 7 status identifiers: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New) and (Not entered).
 - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
 - ☐ E. Other: _____

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For further explanation of the amendment format required by 37 CFR 1.121, see MPEP Sec. 714 and the USPTO website at <http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/officeflyer.pdf>.

If the non-compliant amendment is a **PRELIMINARY AMENDMENT**, applicant is given **ONE MONTH** from the mail date of this letter to supply the corrected section which complies with 37 CFR 1.121. Failure to comply with 37 CFR 1.121 will result in non-entry of the preliminary amendment and examination on the merits will commence without consideration of the proposed changes in the preliminary amendment(s). This notice is not an action under 35 U.S.C. 132, and **this ONE MONTH time limit is not extendable.**

If the non-compliant amendment is a reply to a **NON-FINAL OFFICE ACTION (including a submission for an RCE)**, and since the amendment appears to be a *bona fide* attempt to be a reply (37 CFR 1.135(c)), applicant is given a **TIME PERIOD** of **ONE MONTH** from the mailing of this notice within which to re-submit the corrected section which complies with 37 CFR 1.121 in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD ARE AVAILABLE UNDER 37 CFR 1.136(a).**

If the amendment is a reply to a **FINAL REJECTION**, this form may be an attachment to an Advisory Action. **The period for response to a final rejection continues to run from the date set in the final rejection**, and is not affected by the non-compliant status of the amendment.

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